

## Author Index

Allen, M.F., *see* Friese, C.F. and Allen, M.F.  
Andrén, O., Rajkai, K., Kätterer, T. (Uppsala, Sweden)  
A non-destructive technique for studies of root distribution in relation to soil moisture 269  
Antibus, R.K., *see* Sinsabaugh, R.L. et al.  
Bamforth, S.S. (New Orleans, LA, U.S.A.)  
Enumeration of soil ciliate active forms and cysts by a direct count method ..... 209  
Bardgett, R.D. (Lancaster, Gt. Britain)  
The use of the membrane filter technique for comparative measurements of hyphal  
lengths in different grassland sites ..... 115  
Bater, J.E. (Columbus, OH, U.S.A.)  
A trap design for combined insect emergence and soil arthropod extraction from soil ... 231  
*see* Paoletti, M.G. et al.  
Batmanian, G.J., *see* Potter, R.L. et al.  
Beare, M.H., *see* Jordan, D. and Beare, M.H.  
Beare, M.H., Neely, C.L., Coleman, D.C. and Hargrove, W.L. (Athens, GA, U.S.A.)  
Characterization of a substrate-induced respiration method for measuring fungal,  
bacterial and total microbial biomass on plant residues ..... 65  
Berg, J.D., Hendrix, P.F., Cheng, W.X. (Athens, GA, U.S.A.) and Dillard, A.L.  
(Watkinsville, GA, U.S.A.)  
A labeling chamber for  $^{13}\text{C}$  enrichment of plant tissue for decomposition studies ..... 421  
Blair, J.M., *see* Crossley Jr., D.A. and Blair, J.M.  
Blair, J.M. (Columbus, OH, U.S.A.), Crossley Jr., D.A. and Callaham, L.C. (Athens, GA,  
U.S.A.)  
A litterbasket technique for measurement of nutrient dynamics in forest floors ..... 465  
Bongers, J., *see* Geurs, M. et al.  
Box Jr., J.E., *see* Cheng, W.-X. et al.  
Boyle, J.R., *see* Moldenke, A. et al.  
Bruce, R.R., *see* West, L.T. et al.  
Brussaard, L., *see* Geurs, M. et al.  
Bui, E.N. (Watkinsville, GA, U.S.A.)  
Applications of image analysis to soil micromorphology ..... 305  
Callaham, L.C., *see* Blair, J.M. et al.  
Cambardella, C.A., *see* van Steenbergen, M. et al.  
*see* Elliott, E.T. and Cambardella, C.A.  
Cheng, W.-X., Coleman, D.C. (Athens, GA, U.S.A.) and Box Jr., J.E. (Watkinsville, GA,  
U.S.A.)  
Measuring root turnover using the minirhizotron technique ..... 261  
Cheng, W.X., *see* Berg, J.D. et al.  
Coleman, D.C., *see* Crossley Jr., D.A. and Coleman, D.C.  
*see* Parkinson, D. and Coleman, D.C.  
*see* Beare, M.H. et al.  
*see* Cheng, W.-X. et al.  
Crossley Jr., D.A., *see* Blair, J.M. et al.  
Crossley Jr., D.A. and Coleman, D.C. (Athens, GA, U.S.A.)  
Introduction ..... 1

Crossley Jr., D.A. (Athens, GA, U.S.A.) and Blair, J.M. (Columbus, OH, U.S.A.)	
A high-efficiency, "low-technology" Tullgren-type extractor for soil microarthropods	187
De Ruiter, P.C., <i>see</i> Moore, J.C. and de Ruiter, P.C.	
Didden, W.A.M., Marinissen, J.C.Y. and Kroesbergen, B. (Wageningen, The Netherlands)	
A method to construct artificial soil cores from field soil with a reproducible structure	329
Dillard, A.L., <i>see</i> Berg, J.D. et al.	
Duxbury, J.M., Lauren, J.G. and Fruci, J.R. (Ithaca, NY, U.S.A.)	
Measurement of the biologically active soil nitrogen fraction by a $^{15}\text{N}$ technique	121
Dyer, M.I. (Athens, GA, U.S.A.), Turner, C.L. and Seastedt, T.R. (Manhattan, KS, U.S.A.)	
Remote sensing measurements of production processes in grazinglands: the need for new methodologies	495
Edwards, C.A. (Columbus, OH, U.S.A.)	
The assessment of populations of soil-inhabiting invertebrates	145
Elliott, E.T., <i>see</i> Monz, C.A. et al.	
<i>see</i> van Steenbergen, M. et al.	
Elliott, E.T. and Cambardella, C.A. (Fort Collins, CO, U.S.A.)	
Physical separation of soil organic matter	407
Elliott, E.T., Reuss, D.E., Monz, C.A. (Fort Collins, CO, U.S.A.) and Palm, C.A. (Raleigh, NC, U.S.A.)	
Organic matter contained in soil aggregates from a tropical chronosequence: correction for sand and light fraction	443
Favretto, M.R., <i>see</i> Paoletti, M.G. et al.	
Fogel, R., <i>see</i> Lussenhop, J. et al.	
Friese, C.F. and Allen, M.F. (San Diego, CA, U.S.A.)	
Tracking the fates of exotic and local VA mycorrhizal fungi: methods and patterns	87
Frucci, J.R., <i>see</i> Duxbury, J.M. et al.	
Geurs, M., Bongers, J. and Brussaard, L. (Haren, The Netherlands)	
Improvements to the heptane flotation method for collecting microarthropods from silt loam soil	213
Guedes, R.M., <i>see</i> Potter, R.L. et al.	
Haimi, J., <i>see</i> Huhta, V. et al.	
Haines, B.L. (Athens, GA, U.S.A.)	
Identification and quantification of sulfur gases emitted from soils, leaf litter and live plant parts	473
Han, X.G., <i>see</i> Potter, R.L. et al.	
Hargrove, W.L., <i>see</i> Beare, M.H. et al.	
Hendrix, P.F., <i>see</i> West, L.T. et al.	
<i>see</i> Berg, J.D. et al.	
Hilger, A.B. and Myrold, D.D. (Corvallis, OR, U.S.A.)	
Method for extraction of <i>Frankia</i> DNA from soil	107
Huhta, V., Haimi, J. and Setälä, H. (Jyväskylä, Finland)	
Role of the fauna in soil processes: techniques using simulated forest floor	223
Ingham, E.R., <i>see</i> Lodge, D.J. and Ingham, E.R.	
Jastrow, J.D. and Miller, R.M. (Argonne, IL, U.S.A.)	
Methods for assessing the effects of biota on soil structure	279
Jordan, C.F., <i>see</i> Potter, R.L. et al.	
Jordan, D. (Watkinsville, GA, U.S.A.) and Beare, M.H. (Athens, GA, U.S.A.)	
A comparison of methods for estimating soil microbial biomass carbon	35

Kaplan, D.T., <i>see</i> Walter, D.E. et al.	
Kätterer, T., <i>see</i> Andrén, O. et al.	
Kethley, J. (Chicago, IL, U.S.A.)	
A procedure for extraction of microarthropods from bulk soil samples with emphasis on inactive stages .....	193
Kooistra, M.J. (Wageningen, The Netherlands)	
A micromorphological approach to the interactions between soil structure and soil biota .....	315
Kroesbergen, B., <i>see</i> Didden, W.A.M. et al.	
Lauren, J.G., <i>see</i> Duxbury, J.M. et al.	
Linkins, A.E., <i>see</i> Sinsabaugh, R.L. et al.	
Lodge, D.J. (San Juan, PR, U.S.A.) and Ingham, E.R. (Corvallis, OR, U.S.A.)	
A comparison of agar film techniques for estimating fungal biovolumes in litter and soil .....	131
Lusenhop, J. (Chicago, IL, U.S.A.), Fogel, R. (Ann Arbor, MI, U.S.A.) and Pregitzer, K. (East Lansing, MI, U.S.A.)	
A new dawn for soil biology: video analysis of root-soil-microbial-faunal interactions ..	235
Marinissen, J.C.Y., <i>see</i> Didden, W.A.M. et al.	
McSorley, R. (Gainesville, FL, U.S.A.) and Walter, D.E. (Orlando, FL, U.S.A.)	
Comparison of soil extraction methods for nematodes and microarthropods .....	201
Merckx, R., <i>see</i> van Steenbergen, M. et al.	
Miller, R.M., <i>see</i> Jastrow, J.D. and Miller, R.M.	
Moldenke, A., Shaw, C. and Boyle, J.R. (Corvallis, OR, U.S.A.)	
Computer-driven image-based soil fauna taxonomy .....	177
Monz, C.A., Reuss, D.E. and Elliott, E.T. (Fort Collins, CO, U.S.A.)	
Soil microbial biomass carbon and nitrogen estimates using 2450 MHz microwave irradiation or chloroform fumigation followed by direct extraction .....	55
Monz, C.A., <i>see</i> Elliott, E.T. et al.	
Moore, J.C. (Fort Collins, CO, U.S.A.) and de Ruiter, P.C. (Haren, The Netherlands)	
Temporal and spatial heterogeneity of trophic interactions within below-ground food webs .....	371
Myrold, D.D., <i>see</i> Hilger, A.B. and Myrold, D.D.	
<i>see</i> Nason, G.E. and Myrold, D.D.	
Nason, G.E. and Myrold, D.D. (Corvallis, OR, U.S.A.)	
<sup>15</sup> N in soil research: appropriate application of rate estimation procedures .....	427
Neely, C.L., <i>see</i> Beare, M.H. et al.	
Palm, C.A., <i>see</i> Elliott, E.T. et al.	
Paoletti, M.G., Favretto, M.R. (Padova, Italy), Stinner, B.R., Purrington, F.F. and Bater, J.E. (Wooster, OH, U.S.A.)	
Invertebrates as bioindicators of soil use .....	341
Parkinson, D. (Calgary, Alta., Canada) and Coleman, D.C. (Athens, GA, U.S.A.)	
Microbial communities, activity and biomass .....	3
Parkinson, D., <i>see</i> Wardle, D.A. and Parkinson, D.	
Permar, T.A., <i>see</i> Walter, D.E. et al.	
Potter, R.L., Jordan, C.F., Guedees, R.M., Batmanian, G.J. and Han, X.G. (Athens, GA, U.S.A.)	
Assessment of a phosphorus fractionation method for soils: problems for further investigation .....	453

Pregitzer, K., <i>see</i> Lussenhop, J. et al.	
Purrrington, F.F., <i>see</i> Paoletti, M.G. et al.	
Rajkai, K., <i>see</i> Andrén, O. et al.	
Reuss, D.E., <i>see</i> Monz, C.A. et al. <i>see</i> Elliott, E.T. et al.	
Seastedt, T.R., <i>see</i> Dyer, M.I. et al.	
Setälä, H., <i>see</i> Huhta, V. et al.	
Shaw, C., <i>see</i> Moldenke, A. et al.	
Sinsabaugh, R.L., Antibus, R.K. and Linkins, A.E. (Potsdam, NY, U.S.A.)	
An enzymic approach to the analysis of microbial activity during plant litter decomposition .....	43
Stinner, B.R., <i>see</i> Paoletti, M.G. et al.	
Tollner, E.W. (Griffin, GA, U.S.A.)	
X-ray computed tomography applications in soil ecology studies .....	251
Turner, C.L., <i>see</i> Dyer, M.I. et al.	
Van Elsas, J.D. and Waalwijk, C. (Wageningen, The Netherlands)	
Methods for the detection of specific bacteria and their genes in soil .....	97
Van Steenbergen, M., Merckx, R. (Leuven, Belgium), Cambardella, C.A. and Elliott, E.T. (Fort Collins, CO, U.S.A.)	
Two simple indexes for distributions of soil components among size classes .....	335
Waalwijk, C., <i>see</i> van Elsas, J.D. and Waalwijk, C.	
Walter, D.E., <i>see</i> McSorley, R. and Walter, D.E.	
Walter, D.E., Kaplan, D.T. and Permar, T.A. (Orlando, FL, U.S.A.)	
Missing links: a review of methods used to estimate trophic links in soil food webs .....	399
Wardle, D.A. and Parkinson, D. (Calgary, Alta., Canada)	
A statistical evaluation of equations for predicting total microbial biomass carbon using physiological and biochemical methods .....	75
Wessman, C.A. (Boulder, CO, U.S.A.)	
Remote sensing of soil processes .....	479
West, L.T., Hendrix, P.F. (Athens, GA, U.S.A.) and Bruce, R.R. (Watkinsville, GA, U.S.A.)	
Micromorphic observation of soil alteration by earthworms .....	363

